

- molurus molurus* Linn.) in Keoladeo National Park, Bharatpur, Rajasthan. *J. Bombay nat. Hist. Soc.* 86(3): 381-387.
- BHUPATHY, S. & V.S. VIJAYAN (1993): Aspects of the feeding ecology of *Lissemys punctata* (Testudines : Trionychidae) in Keoladeo National Park, Bharatpur, India. *Hamadryad* 18: 13-16.
- BHUPATHY, S. & V.S. VIJAYAN (1994): Aestivation of turtles in Keoladeo National Park, Bharatpur with special reference to *Lissemys punctata*. *J. Bombay nat. Hist. Soc.* 91(3): 398-402.
- DAS, I. (1997): Checklist of the reptiles of India. with English common names. *Hamadryad* 22(1): 32-45.

17. A LARGE BROOD OF THE GREEN PIT VIPER (*TRIMERESURUS GRAMINEUS*)

A green pit viper (*Trimeresurus gramineus*) was caught on May 7, 1997, close to Nere village, Panvel, Navi Mumbai, at 2330 hrs. The snake was brought to the Indian Herpetological Society, Raigad branch. Upon closer observation and palpation, it was found to be gravid. It measured 105 cm (TBL) and was parrot green dorsally and yellow ventrally. The maximum recorded length for this species is 111.7 cm (Daniel 1983).

The snake was kept in a wooden cage measuring 0.9 m x 0.6 m x 0.6 m, with two netting windows for ventilation and glass on one side for observation. A potted plant kept in the cage was instantly accepted by the female. On approaching the cage, the female adopted a defensive posture and threw the forebody into a large 'S', resting the mid-body on the plant. Unusually rapid movements of the tail tip were observed, similar to snakes of *Boiga* species.

The following day the snake was presented with a house gecko (*Hemidactylus* sp.), which was not consumed. When the cage was checked on May 10, at about 0200 hrs, no neonates were seen. But at 0900 hrs on the same day, 20 neonates were observed in the cage. Since the literature (Daniel 1983, Mattison 1995, Khaire 1996) does not mention time taken for birth it would be relevant to state that all 20 young were born within 6-7 hours.

Post-birth membrane was present on 15 neonates. Of these 11 were bottle green dorsally, while nine were parrot green, with a yellow

tinge. All had a prominent black streak on either side of the head, extending from the eye to the neck. Distinct, irregular, dark cross-bars were also visible on the dorsum of all neonates. The size ranged from 11-13 cm (TBL). All the young were healthy and active. The female was motionless, and rested for about three hours on the plant.

The house gecko introduced on May 8, 1999 was still alive in the cage. On May 10, three additional juvenile house geckos, two juvenile frogs (*Rana* sp.) and three juvenile toads (*Bufo* sp.) were introduced in the cage. All neonates sloughed three days after birth. One fed on a juvenile house gecko after moulting. No feeding was observed in the cage for the next three days. There is little information about the young of this species having fed in captivity (Barooa 1951, Kinnear 1912). On May 16, all neonates and the female were released in a forested tract near Panvel.

From the literature surveyed, the largest previously recorded brood consisted of 15 young (Kinnear 1912). This observation appears to be the largest brood size for the species.

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REFERENCES

- BAROOA, J.N. (1951): Breeding of the green pit viper (*Trimeresurus gramineus*). *J. Bombay nat. Hist. Soc.* 39: 414.
- DANIEL, J.C. (1983): *The Book of Indian Reptiles*. Bombay Natural History Society, Bombay.
- KHAIRE, N. (1996): *Indian Snakes*. Indian Herpetological Society, Pune. pp 106.
- KINNEAR, N.B. (1912): Breeding of common green viper (*Lachesis gramineus*). *J. Bombay nat. Hist. Soc.* 21: 1339.
- MATTISON, C. (1995): *The Encyclopedia of Snakes*. Facts on File Inc., New York. 256 pp.

18. OBSERVATION ON THE REPRODUCTION OF
POLYPEDATES LEUCOMYSTAX (GRAVENHORST 1829)
(ANURA : RHACOPHORIDAE)

On June 6, 1998, at 1945 hrs, we spotted a pair of *Polypedates leucomystax* in amplexus inside a newly built tank (180 cm x 240 cm x 180 cm) with 150 cm deep rainwater. Five other males were also observed calling around the same tank. At 1951 hrs the female (SVL 60 mm) discharged a colourless gel and started to work her hindlimbs slowly in a sideways fanning motion from her ankles, touching the cloaca. At the same time the male (SVL 48 mm) too followed the female in moving its hindlimbs from the ankles, between the cloaca and ankles of the female. A white frothy mass was formed which adhered to the wall of the tank. After a few minutes, the female started discharging a few ova at a time into the foam at intervals of 10-20 seconds, the intervals increased to maximum one minute. Between intervals both male and female stopped moving their hindlimbs. Every time the female moved the hindlimbs, the male did the same. Finally, the foam reached a size of c. 6 x 7.5 cm.

As the female stopped laying eggs at 2030 hrs, the male withdrew its feet from the foam and slowly dismounted from the female. During the foam-nest construction the female kept her eyes closed only once at 2029 hrs and stopped moving her feet. She moved her hindlimbs only once after the male dismounted. At 2030 hrs, she sat 2 cm above the foam, withdrawing her feet, stood stationary for 5 minutes in the same

position and jumped into the water at 2035 hrs, swimming to the far side of the tank. In the meanwhile, the foam covering became reddish-brown, the centre remaining white.

Just before ovulation, the pair was observed taking a dip in the water immersing up to two-thirds of their bodies. Then they climbed about 6 cm above the level of the water. The female held firmly on to the wall, taking the support of a dried remnant of old foam. The male held the female firmly under her shoulder. During ovulation, the femur of the female was at right angles to her body. Distinct pulsation was observed in her abdomen while discharging ova.

The event described was observed under a charge light. Although the observation was very close, the nearest was 25 cm, the pair was apparently not disturbed. In fact, the male jumped to the light source after dismounting.

The same tank had been used by 10 pairs of *Polypedates leucomystax*, including the observed pair, since April 11, 1998, within a period of 56 days.

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